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(FILE 'HOME' ENTERED AT 12:38:14 ON 24 DEC 2005)

FILE 'USPATFULL' ENTERED AT 12:38:22 ON 24 DEC 2005

L1 2002 S (TREAT? (3A) VESSEL)/CLM  
L2 949 S (TREAT? (3A) VESSEL)/AB  
L3 549 S L1 AND L2  
L4 147 S (TREAT? (3A) VESSEL)/TI  
L5 47 S L3 AND L4  
L6 47 S L5 NOT (CELL DEATH)  
L7 154 S L3 AND BLOOD  
L8 15 S L7 AND L4  
L9 15 S L8 NOT (CELL DEATH)

=> save all

ENTER NAME OR (END):110634114/l

L# LIST L1-L9 HAS BEEN SAVED AS 'L10634114/L'

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L9 ANSWER 13 OF 15 USPATFULL on STN  
TI Device for **treating a blood vessel**  
AB A device for **treating a blood vessel**  
comprises an outer sheath (10) containing, on the one hand, an endoprosthesis (1) whose distal end is equipped with a. . .  
SUMM The present invention relates to a device for treating a **blood vessel**. The device is used in particular for supporting atherosomatous arteries following dilation, or equally for bypassing aneurisms.  
SUMM To this end, the invention relates to a device for treating a **blood vessel**, characterized in that it comprises an outer sheath containing, on the one hand, an endoprosthesis whose distal end is. . .  
SUMM The device for treating a **blood vessel** according to the invention can include one or more of the following characteristics:  
DRWD FIG. 6 is a side view of a device for treating a **blood vessel**, according to the invention, by positioning of an endoprosthesis;  
CLM What is claimed is:  
1. A device for **treating a blood vessel**, comprising: an outer sheath capable of being inserted into a **blood vessel**; a vascular endoprosthesis capable of being inserted into and supporting a **blood vessel** and contained within said outer sheath, said endoprosthesis having a distal end; a support contained within said outer sheath, . . .  
9. A device for **treating a blood vessel**, comprising: an outer sheath; an endoprosthesis contained within said outer sheath, said endoprosthesis having a distal end; a support contained. . .  
11. A device for **treating a blood vessel**, comprising: an outer sheath; an endoprosthesis contained within said outer sheath, said endoprosthesis having a distal end; support contained within. . .  
12. A device for **treating a blood vessel**, comprising: an outer sheath having a distal end; a support having a distal end extending into said outer sheath; an. . .

ACCESSION NUMBER:

1998:104087 USPATFULL

TITLE:

Device for **treating a blood vessel**

INVENTOR(S):

Perouse, Eric, L'Isle Adam, France

PATENT ASSIGNEE(S):

Laboratoire Perouse Implant, Bornel, France (non-U.S. corporation)

PATENT INFORMATION:  
|

| NUMBER     | KIND | DATE     |
|------------|------|----------|
| US 5800506 |      | 19980901 |

APPLICATION INFO.:

|                |  |              |
|----------------|--|--------------|
| US 1995-427904 |  | 19950426 (8) |
|----------------|--|--------------|

PRIORITY INFORMATION:

|              |  |          |
|--------------|--|----------|
| FR 1994-5034 |  | 19940426 |
|--------------|--|----------|

DOCUMENT TYPE:

|         |
|---------|
| Utility |
|---------|

FILE SEGMENT:

|         |
|---------|
| Granted |
|---------|

PRIMARY EXAMINER:

|                |
|----------------|
| Weiss, John G. |
|----------------|

ASSISTANT EXAMINER:

|                     |
|---------------------|
| Cuddihy, Francis K. |
|---------------------|

LEGAL REPRESENTATIVE:

|                          |
|--------------------------|
| Wenderoth, Lind & Ponack |
|--------------------------|

NUMBER OF CLAIMS:

|    |
|----|
| 15 |
|----|

EXEMPLARY CLAIM:

|   |
|---|
| 1 |
|---|

NUMBER OF DRAWINGS:

|   |
|---|
| 10 Drawing Figure(s); 4 Drawing Page(s) |
|---|

LINE COUNT:

|     |
|-----|
| 246 |
|-----|

L9 ANSWER 14 OF 15 USPATFULL on STN

TI Method of **treating blood vessel** disorders

of the skin using vitamin K

AB A vitamin K mixture is used in a topical application for the treatment of **blood vessel** disorders of the skin which include, but are not limited to, actinic and iatrogenic purpura, lentigines and other vascular problems. . .

SUMM . . . is a major area of dermatological therapy given the increasingly large aging population. A number of dermatological conditions which involve **blood** vessel disorders of the skin and skin disorders caused by photoaging include actinic and iatrogenic purpura, lentigines, telangiectasias of the. . . treatment for actinic or iatrogenic purpura and the only treatment for spider veins is surgical. Thus, treatments for these various **blood** vessel disorders of the skin are clearly limited at best.

SUMM The present invention relates to a new composition and method of treating **blood** vessel disorders of the skin using vitamin K. I have discovered that disorders of the skin which respond to treatment.

SUMM . . . of my invention in mind, it is an object of this invention to provide a method of treatment of various **blood** vessel disorders of the skin using vitamin K in addition to providing a formula for a vitamin K cream to treat various **blood** vessel disorders of the skin.

DETD . . . cream base system delivers vitamin K into the skin and appears to have an influence on the disappearance of extravascular **blood**, as well as decreasing the incidence of purpura, when compared to its base, when used on a twice daily basis. . . active to the placebo agent. There appears to be no effect on the vessel themselves, only on leaking vessels and **blood** already outside the dermal vascular system with this particular formulation and concentration.

DETD The initial study of the effects of a vitamin K-1 cream used in treatment of **blood** vessel disorders of the skin and skin disorders caused by photoaging involved use of a cream of 0.8% to 1%. .

DETD . . . K-1 cream in comparison to FIG. 1 which shows iatrogenic purpura prior to treatment. FIGS. 3, 4 and 6 show **blood** vessel disorders of the skin and disorders of the skin caused by photoaging before treatment. FIG. 5 shows the effect. . .

DETD A case study of the effects of a vitamin K-1 cream-5% used in treatment of **blood** vessel disorders of the skin and skin disorders caused by photoaging involve the use of a vitamin K-1 cream having a 5% concentration of vitamin K-1 on five patients. The patients exhibited **blood** vessel disorders on certain areas of the body. The disorders had been caused by either trauma, surgery or sun damage. . .

DETD Three out of the five patients showed a decrease in the appearance of true **blood** vessels following application of the vitamin K-1 cream-5%. In addition, the vitamin K-1 cream-5% was applied to **blood** vessel disorders on the legs. However, no improvement of **blood** vessel disorders located on the legs were observed.

DETD . . . new and useful formulation of and method of using a vitamin K cream in topical therapy for the treatment of **blood** vessel disorders of the skin, it is not intended that such references be construed as limitations upon the scope of. . .

CLM What is claimed is:

1. A method of **treating** **blood** **vessel** disorders of the skin and skin disorders caused by photo-aging comprising: a) coformulating a pharmaceutical composition wherein said composition contains from 0.01% to 50% vitamin K; b) applying said pharmaceutical composition topically to **treat** **blood** **vessel** disorders of the skin and skin disorders caused by photoaging, wherein said **blood** **vessel** disorders of the skin and skin disorders caused by photo-aging does not include spider veins.

2. The method of **treating blood vessel**  
disorders of the skin and skin disorders caused by photoaging as in  
claim 1, wherein the method comprises: a) coformulating. . .  
granular, Pluronic F-127 NF, methyl paraben, propyl paraben, Dowicil  
200, and water; and b) applying said pharmaceutical composition  
topically to **treat** said **blood vessel**  
disorders of the skin and skin disorders caused by photoaging.

3. The method of **treating blood vessel**  
disorders of the skin and skin disorders caused by photoaging as in  
claim 1, wherein said pharmaceutical composition includes  
substantially: . . .

4. The method of **treating blood vessel**  
disorders of the skin and skin disorders caused by photoaging as in  
claim 1, wherein said pharmaceutical composition includes  
substantially: . . .

5. The method of **treating blood vessel**  
disorders of the skin and skin disorders caused by photoaging as in  
claim 1, wherein the form of vitamin K. . .

6. A method of **treating blood vessel**  
disorders of the skin and skin disorders caused by photo-aging  
comprising: a) coformulating a pharmaceutical composition wherein said  
composition contains from 0.01% to 50% vitamin K; b) applying said  
pharmaceutical composition topically to **treat** **blood**  
**vessel** disorders of the skin and skin disorders caused by  
photoaging selected from the group consisting of bruising, actinic  
purpura, iatrogenic. . .

ACCESSION NUMBER: 96:34166 USPATFULL

TITLE: Method of **treating blood**

vessel disorders of the skin using vitamin K  
INVENTOR(S): Elson, Melvin L., Nashville, TN, United States

PATENT ASSIGNEE(S): Mayapple Holdings, LLC, Burns, TN, United States (U.S.  
corporation)

|  | NUMBER   | KIND | DATE         |
|--|--|------|--------------|
| PATENT INFORMATION:                        | US 5510391   |      | 19960423     |
| APPLICATION INFO.:                         | US 1993-140615   |      | 19931022 (8) |
| DOCUMENT TYPE:                             | Utility  |      |              |
| FILE SEGMENT:                              | Granted  |      |              |
| PRIMARY EXAMINER:                          | Henley, III, Raymond   |      |              |
| LEGAL REPRESENTATIVE:                      | Waddey & Patterson, Waddey, Jr., I. C., Taylor, Jr.,<br>Arles A. |      |              |
| NUMBER OF CLAIMS:                          | 8  |      |              |
| EXEMPLARY CLAIM:                           | 1  |      |              |
| NUMBER OF DRAWINGS:                        | 7 Drawing Figure(s); 4 Drawing Page(s)                           |      |              |
| LINE COUNT:                                | 374  |      |              |
| CAS INDEXING IS AVAILABLE FOR THIS PATENT. |  |      |              |

L9 ANSWER 15 OF 15 USPATFULL on STN

TI Catheter for the examination or **treatment** of a **blood**  
**vessel** and apparatus for the utilization of this catheter  
AB . . . the definitive obturation of the vessel. This catheter and the  
apparatus are also particularly adaptable for neuroradiological  
examinations and to **treatments** of **blood**  
**vessels**.

SUMM The examination and the obturation of **blood** vessels by means  
of a small inflated balloon have been envisaged many years ago. Some  
patients have been treated by. . .

SUMM The invention also relates to an apparatus for examining or treating a  
**blood** vessel by means of such a catheter, which comprises, on a  
fixed support, at least two syringes one of which. . .

SUMM . . . may be carried out automatically with the same needle. The apparatus therefore permits the penetration of the balloon in a **blood vessel**, the supervision of its progression, the inflation and deflation of the balloon whenever this is required at precise regions. . .

DETD . . . can even be shifted from one head to the other. For example, in the course of a treatment in a **blood vessel**, one of the tubes 1 is connected to a source of contrasting product which fills the balloon 4 while. . .

DETD The driving of the balloon and catheter in the vessel is generally facilitated by the **blood** itself or by special injections, but it is always necessary to supervise this displacement and to control and even assist. . .

DETD Thus there are provided a catheter and an apparatus which are particularly adapted for neuroradiological examinations and the treatment of **blood vessels** which permit achieving at last the superselective arteriography of the branches of the internal carotide and the treatment by. . .

CLM What is claimed is:

1. A catheter structure for the examination or **treatment** of a **blood vessel**, comprising inflatable balloon means entirely flexible and of expansible material, at least two flexible capillary tubes which have a uniform. . .
14. An apparatus for obturating a **blood vessel** comprising in combination: a catheter comprising an inflatable balloon of expansible material, at least one flexible capillary tube having. . . between the end member and the outer connecting socket, a hypodermic needle for the insertion of the catheter in the **blood vessel**, a head receiving said connecting socket which socket is removable from the head, at least two syringes disposed in. . .

ACCESSION NUMBER: 80:22809 USPATFULL

TITLE: Catheter for the examination or **treatment** of a **blood vessel** and apparatus for the utilization of this catheter

INVENTOR(S): Granier, Pierre M., Nogent-sur-Marne, France

PATENT ASSIGNEE(S): Societe d'Etudes et d'Applications Technologiques-Serat, Geneve, France (non-U.S. corporation)

|                     | NUMBER         | KIND | DATE         |
|---------------------|----------------|------|--------------|
| PATENT INFORMATION: | US 4202346     |      | 19800513     |
| APPLICATION INFO.:  | US 1977-822942 |      | 19770808 (5) |

|                       | NUMBER                                 | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | FR 1976-24403                          | 19760810 |
| DOCUMENT TYPE:        | Utility                                |          |
| FILE SEGMENT:         | Granted                                |          |
| PRIMARY EXAMINER:     | Pellegrino, Stephen C.                 |          |
| LEGAL REPRESENTATIVE: | Schuylar, Birch, McKie & Beckett       |          |
| NUMBER OF CLAIMS:     | 20                                     |          |
| EXEMPLARY CLAIM:      | 14                                     |          |
| NUMBER OF DRAWINGS:   | 9 Drawing Figure(s); 4 Drawing Page(s) |          |
| LINE COUNT:           | 505                                    |          |

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L9 ANSWER 10 OF 15 USPATFULL on STN

TI Endoprostheses for the **treatment of blood-vessel** bifurcation stenosis and purpose-built installation device

AB An endoprostheses for the **treatment of blood-vessel** bifurcation stenosis. The endoprostheses comprises three tubular sections (110, 120 and 140) and two connectors (130 and 150). A distal. . . aligned at least approximately with a proximal section (110). The first distal section is intended for insertion into a first **blood vessel** (T2) branching off on the bifurcation. The first distal section (120) is linked to the proximal section (110) by. . .

SUMM This invention relates to the field of endoprostheses for the treatment of **blood-vessel** bifurcation stenosis. In particular, this invention also relates to a purpose-built installation device.

SUMM . . . particular, observed that standard endoprostheses are not fully satisfactory when, as is frequently the case, there is stenosis at a **blood-vessel** bifurcation. In such cases, treatment using standard endoprostheses requires two separate endoprostheses. One of these is placed in each of. . .

SUMM A primary goal of this invention is to develop existing endoprostheses in order to facilitate and improve treatment of **blood-vessel** bifurcation stenosis.

SUMM a first balloon of suitable length for insertion into two approximately aligned sections of the **blood vessel** to be treated: the main stem and the first branching **blood vessel**, on either side of the bifurcation area respectively; and

SUMM a second balloon of suitable nature for insertion into the second **blood vessel** branching off from the bifurcation.

DETD . . . is a proximal section having as its centre axis 111. It is intended for insertion into main stem T1 of **blood vessel** V for treatment, upstream of the bifurcation.

DETD . . . least approximately aligned with proximal section 110 prior to use. This first distal section 120 is intended for insertion into **blood vessel** T2 branching off from the bifurcation as is seen in particular in FIGS. 6 and 7.

DETD . . . of being parallel to the latter, prior to use. The second distal section (140) is intended to be inserted into **blood vessel** T3 branching off from the bifurcation, as is seen in particular in FIGS. 6 and 7.

DETD . . . side opposite connector 130 embodying in the cylindrical structure forming proximal section 110 the shape of the ostium of the **blood vessel** branching off from the coronary bifurcation onto which it will be applied.

DETD As regards the second balloon (230), this is consonant with its purpose of being positioned in the second **blood vessel** (T3) branching off from the bifurcation. Balloon 230 is preferably shorter than balloon 210. As shown in the accompanying. . .

DETD After protective sheath 260 has been withdrawn, guide-wires 222 and 242, which have been inserted into **blood vessels** T2 and T3 branching off from the coronary bifurcation, are manipulated. Balloons 210 and 230, located respectively inside proximal. . .

DETD . . . the bifurcation using endoprostheses 100 and employing dilation of balloons 210 and 230. The invention may also apply to other **blood-vessel** bifurcations, arteries or veins, such as, for example and non-limitatively, renal arteries, supra-aortic trunci, arteries leading from the aorta to. . .

CLM What is claimed is:

1. An endoprostheses for the **treatment of blood-vessel** bifurcation stenosis, comprising three tubular sections and two articulation connectors namely: a proximal section; a first distal section aligned at least approximately with the proximal section and intended for insertion into a first **blood vessel** branching

off from the bifurcation, the first distal section being linked to the proximal section by a lateral first. . . a second distal section located at the side of the first distal section and intended for insertion into a second **blood** vessel branching off from the bifurcation, both distal sections having their proximal ends linked by a second connector which allows relative pivoting of said distal sections about said second connector to accommodate the **blood-vessel** bifurcation, wherein the distal end of the proximal section is chamfered and the proximal end of the second distal section. . .

11. An endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis, comprising three tubular sections and two articulation connectors namely: a proximal section; a first distal section aligned at least approximately with the proximal section and intended for insertion into a first **blood** vessel branching off from the bifurcation, the distal section being linked to the proximal section by a lateral first connector; . . . a second distal section located at the side of the first distal section and intended for insertion into a second **blood** vessel branching off from the bifurcation, both distal sections having their proximal ends linked by a second connector which allows relative pivoting of said distal sections about said connector to accommodate the **blood-vessel** bifurcation, wherein the three tubular sections are of identical diameter prior to use and wherein the distal end of the. . .

21. An endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis, comprising three tubular sections and two articulation connectors namely: a proximal section; a first distal section aligned at least approximately with the proximal section and intended for insertion into a first **blood** vessel branching off from the bifurcation, the distal section being linked to the proximal section by a lateral first connector; . . . a second distal section located at the side of the first distal section and intended for insertion into a second **blood** vessel branching off from the bifurcation, both distal sections having their proximal ends linked by a second connector which allows relative pivotment of said distal sections about said second connector to accommodate the **blood-vessel** bifurcation wherein the second connector has at its centre a plane of symmetry determined by the axes of the tubular. . .

ACCESSION NUMBER: 2001:17757 USPATFULL  
TITLE: Endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis and purpose-built installation device  
INVENTOR(S): Dibie, Alain, 37 avenue de Lowendale, 75015 Paris, France

|                     | NUMBER         | KIND | DATE                     |
|---------------------|----------------|------|--------------------------|
| PATENT INFORMATION: | US 6183509     | B1   | 20010206                 |
|                     | WO 9634580     |      | 19961107                 |
| APPLICATION INFO.:  | US 1998-945973 |      | 19980126 (8)             |
|                     | WO 1996-IB403  |      | 19960503                 |
|                     |                |      | 19980126 PCT 371 date    |
|                     |                |      | 19980126 PCT 102(e) date |

|                       | NUMBER                           | DATE     |
|-----------------------|----------------------------------|----------|
| PRIORITY INFORMATION: | FR 1995-5334                     | 19950504 |
| DOCUMENT TYPE:        | Utility                          |          |
| FILE SEGMENT:         | Granted                          |          |
| PRIMARY EXAMINER:     | Milano, Michael J.               |          |
| ASSISTANT EXAMINER:   | Pellegrino, Brian E.             |          |
| LEGAL REPRESENTATIVE: | Blakely Sokoloff Taylor & Zafman |          |
| NUMBER OF CLAIMS:     | 30                               |          |

USPATFULL on STN

TI STENT FOR **TREATING PATHOLOGICAL BODY VESSELS**

AB A known method for **treating** pathological body **vessels** is the implantation of stents as an extended filament, by means of a catheter, which springs into a given form. . .

SUMM [0003] The introduction of spiral stents of metal or plastic into a diseased body vessel for treating pathological body and **blood** vessels is known. Such treatments are considered for diseased vessel occlusions or aneurysms, particularly of the aorta. The implantation of. . .

SUMM . . . found on the outer periphery, thus on the envelope of the tube-shaped stent. In this way, a disruption of the **blood** flow flowing through the body vessel is kept as small as possible. Advantageously, the connection sites are bent outward radially, . . .

SUMM . . . the fabric structure or of the fibers. For example, aneurysms can be sealed off in this way from the normal **blood** flow, whereby the danger of a rupture of the aneurysm is effectively eliminated, or at least is considerably reduced. The. . .

CLM What is claimed is:

1. A stent for **treating** pathological body **vessels** comprising at least two longitudinally extended filaments that can be delivered into a body vessel with an implantation device, the. . .

ACCESSION NUMBER: 2001:91650 USPATFULL

TITLE: STENT FOR **TREATING PATHOLOGICAL BODY VESSELS**

INVENTOR(S): STRECKER, ERNST-PETER, KARLSRUHE, Germany, Federal Republic of

PATENT ASSIGNEE(S): Thomas O. Hoover (U.S. individual)

|                     | NUMBER        | KIND | DATE     |
|---------------------|---------------|------|----------|
| PATENT INFORMATION: | US 2001003801 | A1   | 20010614 |
|                     | US 6485524    | B2   | 20021126 |

APPLICATION INFO.: US 1999-250714 A1 19990216 (9)

RELATED APPLN. INFO.: Continuation of Ser. No. WO 1998-DE226, filed on 24 Jan 1998, UNKNOWN

|                       | NUMBER   | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | DE 1997-19703482   | 19970131 |
| DOCUMENT TYPE:        | Utility  |          |
| FILE SEGMENT:         | APPLICATION  |          |
| LEGAL REPRESENTATIVE: | HAMILTON BROOK SMITH AND REYNOLDS, P.C., TWO MILITIA DR, LEXINGTON, MA, 02421-4799 |          |
| NUMBER OF CLAIMS:     | 50   |          |
| EXEMPLARY CLAIM:      | 1  |          |
| NUMBER OF DRAWINGS:   | 12 Drawing Page(s)   |          |
| LINE COUNT:           | 1308   |          |

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L9 ANSWER 7 OF 15 USPATFULL on STN

TI Endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis and purpose-built installation device

AB An endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis. The endoprosthesis comprises three tubular sections and two connectors. A first distal section is aligned at least approximately with a proximal section. The first distal section is intended for insertion into a first **blood vessel** branching off on the bifurcation. The first distal section is linked to the proximal section by a first lateral. . . .

SUMM [0001] This invention relates to the field of endoprostheses for the treatment of **blood-vessel** bifurcation stenosis.

SUMM . . . particular, observed that standard endoprostheses are not fully satisfactory when, as is frequently the case, there is stenosis at a **blood-vessel** bifurcation. In such cases, treatment using standard endoprostheses requires two separate endoprostheses. One of these is placed in each of. . . .

SUMM [0007] A primary goal of this invention is to develop existing endoprostheses in order to facilitate and improve treatment of **blood-vessel** bifurcation stenosis.

SUMM [0016] a first balloon of suitable length for insertion into two approximately aligned sections of the **blood vessel** to be treated: the main stem and the first branching **blood vessel**, on either side of the bifurcation area respectively; and

SUMM [0017] a second balloon of suitable nature for insertion into the second **blood vessel** branching off from the bifurcation.

DETD . . . is a proximal section having as its centre axis 111. It is intended for insertion into main stem T1 of **blood vessel** V for treatment, upstream of the bifurcation.

DETD . . . least approximately aligned with proximal section 110 prior to use. This first distal section 120 is intended for insertion into **blood vessel** T2 branching off from the bifurcation as is seen in particular in FIGS. 6 and 7.

DETD . . . of being parallel to the latter, prior to use. The second distal section (140) is intended to be inserted into **blood vessel** T3 branching off from the bifurcation, as is seen in particular in FIGS. 6 and 7.

DETD . . . side opposite connector 130 embodying in the cylindrical structure forming proximal section 110 the shape of the ostium of the **blood vessel** branching off from the coronary bifurcation onto which it will be applied.

DETD [0069] As regards the second balloon (230), this is consonant with its purpose of being positioned in the second **blood vessel** (T3) branching off from the bifurcation. Balloon 230 is preferably shorter than balloon 210. As shown in the accompanying. . . .

DETD [0103] After protective sheath 260 has been withdrawn, guide-wires 222 and 242, which have been inserted into **blood vessels** T2 and T3 branching off from the coronary bifurcation, are manipulated. Balloons 210 and 230, located respectively inside proximal. . . .

DETD . . . the bifurcation using endoprosthesis 100 and employing dilation of balloons 210 and 230. The invention may also apply to other **blood-vessel** bifurcations, arteries or veins, such as, for example and non-limitatively, renal arteries, supra-aortic trunci, arteries leading from the aorta to. . . .

CLM What is claimed is:

27. An endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis, comprising three tubular sections and two articulation connectors namely: a proximal section; a first distal section aligned at least approximately with the proximal section and intended for insertion into a first **blood vessel** branching off from the bifurcation, the distal section being linked to the proximal section by a lateral connector; and. . . . a second distal

section located at the side of the first distal section and intended for insertion into a second **blood** vessel branching off from the bifurcation, both distal sections having their proximal ends linked by a second connector which allows relative pivoting of said distal sections about said connector to accommodate the **blood-vessel** bifurcation, wherein the three tubular sections are of identical diameter prior to use.

38. An endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis, comprising three tubular sections and two articulation connectors namely: a proximal section; a first distal section aligned at least approximately with the proximal section and intended for insertion into a first **blood** vessel branching off from the bifurcation, the distal section being linked to the proximal section by a lateral connector; and. . . a second distal section located at the side of the first distal section and intended for insertion into a second **blood** vessel branching off from the bifurcation, both distal sections having their proximal ends linked by a second connector which allows relative pivotment of said distal sections about said second connector to accommodate the **blood-vessel** bifurcation wherein the second connector has at its centre a plane of symmetry determined by the axes of the tubular. . .

ACCESSION NUMBER: 2001:200340 USPATFULL  
TITLE: Endoprosthesis for the **treatment of blood-vessel** bifurcation stenosis and purpose-built installation device  
INVENTOR(S): Dibie, Alain, Paris, France

|                       | NUMBER  | KIND | DATE         |
|-----------------------|---|------|--------------|
| PATENT INFORMATION:   | US 2001039448   | A1   | 20011108     |
| APPLICATION INFO.:    | US 2000-730974  | A1   | 20001204 (9) |
| RELATED APPLN. INFO.: | Continuation of Ser. No. US 1998-945973, filed on 26 Jan 1998, GRANTED, Pat. No. US 6183509 |      |              |

|                       | NUMBER   | DATE     |
|-----------------------|--|----------|
| PRIORITY INFORMATION: | FR 1995-5334   | 19950504 |
| DOCUMENT TYPE:        | Utility  |          |
| FILE SEGMENT:         | APPLICATION  |          |
| LEGAL REPRESENTATIVE: | Blakely, Sokoloff, Taylor & Zafman LLP, 7th Floor, 12400 Wilshire Boulevard, Los Angeles, CA, 90025-1026 |          |
| NUMBER OF CLAIMS:     | 22   |          |
| EXEMPLARY CLAIM:      | 1  |          |
| NUMBER OF DRAWINGS:   | 4 Drawing Page(s)  |          |
| LINE COUNT:           | 523  |          |

L9 ANSWER 8 OF 15 USPATFULL on STN  
TI Catheter for intraluminal **treatment of a vessel** segment with ionizing radiation  
AB A prepared catheter for intraluminal **treatment of a vessel** section with ionizing radiation, which catheter has an elongate shaft with a proximal end and distal end as percutaneous transluminal. . .  
SUMM . . . radiation are used, for example, during or after percutaneous transluminal angioplasty, such as balloon dilatation or atherectomy of a stenosed **blood** vessel section, in order to prevent restenosis of this section. This is based on the theory that application of a. . .  
SUMM . . . and consequently, long treatment times. Because of the necessary centering of the emitter in an inflated balloon, the flow of **blood** in the treated vessel has to be interrupted during this

SUMM long treatment, which is undesirable.

SUMM The increasing importance of minimally invasive surgery and the treatment of ever narrower **blood** vessels demand guide catheters, and consequently balloon catheters, of ever smaller profile. Flexibility as well as longitudinal force and torsion. . .

SUMM . . . liquids. The advantage of this is, for example, that when providing treatment using a balloon which interrupts the flow of **blood**, it is possible to respond quickly to an ischaemic reaction on the part of the patient by deflating the balloon.

SUMM In a preferred embodiment of the invention, the inflation medium is carbon dioxide. In the treatment of **blood** vessels, it is possible, in the event of a leaking or defective balloon, for the **blood** to absorb a certain amount of carbon dioxide without harming the patient. Since carbon dioxide is transported anyway in the **blood**, its biological tolerability in humans is not in question.

SUMM . . . result from the abating energy of the emitter, the burden on the patient is minimized by interrupting the flow of **blood**. The advantages of the invention are seen not only in this application, however, but in all balloon catheters whose deflation. . . catheters mentioned in the introduction, in the case of dilation catheters or occlusion catheters for use in coronary or peripheral **blood** vessels or in neurology, and in the case of other catheters.

CLM What is claimed is:

1. A prepared balloon catheter for intraluminal ionizing radiation **treatment** of a **vessel** section within a patient's body, the catheter having an elongate shaft with a gas-filled inflation lumen extending therethrough, and a. . .
2. A prepared balloon catheter for intraluminal ionizing radiation **treatment** of a **vessel** section within a patient's body, the catheter having an elongate shaft with a proximal end and a distal end, a. . .

ACCESSION NUMBER:

2001:107107 USPATFULL

TITLE:

Catheter for intraluminal **treatment** of a **vessel** segment with ionizing radiation

INVENTOR(S):

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| NUMBER | KIND | DATE |
|--------|------|------|
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| PATENT INFORMATION: | US 6258019 | B1 20010710 |
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LEGAL REPRESENTATIVE:

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NUMBER OF CLAIMS:

7

EXEMPLARY CLAIM:

1